

specific information pertaining to each property such as apartment size, number of bedrooms or bathrooms, cost of leasing property, availability of apartments and other amenities. If available, the user can be presented with a digitized picture of the apartment building and/or individual rooms in certain apartments. Also if available, the user can request a digital "walk through" in which a digitized full motion video clip is shown which illustrates specific rooms and features of available properties.

Further objects, features and advantages of the present invention will become apparent from a consideration of the following description and the appended claims when taken in connection with the accompanying drawings.

#### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 is a schematic block diagram of the system of the present invention;

FIG. 2 is a pictorial screen view of a high level graphic map of the present invention;

FIG. 3 is a pictorial screen view of a lower level graphic map of the present invention;

FIG. 4 is a pictorial screen view of a graphic quadrant map of the present invention;

FIG. 5 is a pictorial screen view of a representation of a database record of the present invention including a digitized picture;

FIGS. 6a and 6b are a schematic flow chart diagram showing a method of searching for geographic specific information according to the present invention;

FIG. 7 is a schematic flow chart diagram showing a method of entering and/or updating database entries according to the present invention;

FIG. 8 is a schematic flow chart diagram showing a method of property manager information retrieval according to the present invention.

#### DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENT

Preferred embodiments of the geographic specific information search system and method of the present invention are described herebelow with reference to the drawings.

Referring to FIGS. 1-5, the geographic specific information search system, indicated generally at 10, includes an Internet server 12, running an http daemon process 14. The http daemon process 14 provides an input/output interface and establishes and manages the server's connection to the Internet 16. The http daemon 14 also communicates with the home page 18, which provides the user interface into the search system 10. The home page 18 is written in Hyper-Text Markup Language (HTML) and communicates with a set of scripts 20 which provide additional processing and formulate specific database queries.

In the preferred embodiment, the database 22 is a Structured Query Language (SQL) database. An SQL daemon process 24, running on the server 12, manages the interface between the scripts 20 and the database 22 and is responsible for searching the database 22 for database records which meet certain search criteria. When appropriate records are found, they are forwarded to the home page 18 via the scripts 20.

A system user accesses the home page 18 through the Internet 16. The home page 18 can be accessed and viewed using any standard HTML browser 26 running on a remote machine 28. The browser 26 displays home page informa-

tion forwarded from the system 12. The browser 26 also processes and forwards user instructions to the server 12 for execution. The user gains access to the home page 18 by specifying the home page unique address.

Once reached, the home page 18 provides operation options through a menu of "point and click" items. Referring to FIG. 6, upon selecting the option to query a database, the user is presented with a high level graphical map, as shown in FIG. 2, as a starting point for narrowing the geographic area of the search. The high level graphical map is designated by the home page 18 as an image map. The user is allowed to select a more specific area, in this case a particular state 30, from the high level map by moving a pointing device over the area and selecting the area (step 100, FIG. 6). Since the map is designated as an image map, the browser 26 returns the coordinates of the point selected on the map. The common gateway interface 17 of the http daemon recognizes the coordinates returned from the browser 26 and forwards the coordinates to the scripts 20. The scripts access a set of map tables 21 which contain information relating to blown up map images of areas of the high level map with coordinates on the high level map. From the map tables, a blown up lower level map of the selected area is determined and displayed, as shown in FIG. 3. The lower level map also has specific search regions highlighted, in this case specific cities of interest 32. The user is allowed to select a specific highlighted region again by moving a pointing device over the highlighted region and selecting the region (step 102) and the scripts identify the selected region using the map tables 21. After selecting a city from the state map, the user is prompted to enter a search criteria 104 including number of bedrooms desired, price range, etc.. A query handler 19 receives the search criteria and, together with the SQL daemon 24, accesses the database 22 returning property listings in the selected geographic region meeting the entered search criteria. After the search criteria is entered, a blank map of the selected city is displayed and the user is prompted to select an area of interest on the city map 106. A quadrant map of the selected area assembled by a map compiler 23 is then displayed, as shown in FIG. 4, containing highlighted points of interest 34, in this case locations corresponding to available housing 106. The map compiler 23 integrates the property listings returned from the database search into the quadrant map of the selected area at appropriate locations. Each database record includes not only property listing information but also the coordinates of the property on certain quadrant maps. Therefore, the map compiler 23 can determine where on the quadrant map to display the properties. A table builder 25 is configured to build a map table containing pointers to the property listings returned from the search as well as the coordinates of the properties on the quadrant map.

As shown in FIG. 4, the quadrant map relates points of interest 34 with landmarks 36 in the quadrant so as to give the user a view of where the points of interest 34 lie with respect to the landmarks. When a point of interest 34 is selected by a user (step 110), the home page 18 notifies the scripts 20 of the coordinates selected and the scripts 20 access the newly built map table to form and forward a database query to the SQL daemon 24 which searches the database 22 for the database record containing information relating to the selected point of interest 34. The information is forwarded by the SQL daemon 24 to the scripts 20 which format the information and forward it to the home page 18 for display (step 112). The displayed information can contain text and graphics 36, as shown in FIG. 5. On the display, the user is given the option to request a digitized picture of